**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core \_\_\_\_\_\_\_\_\_**

**Math Properties**

The **commutative property** shows that the **\_\_\_\_\_\_\_\_\_\_\_** of the numbers does not change the answer to an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ problem.

|  |  |
| --- | --- |
| **Commutative Property** | |
| **Addition** | **Multiplication** |

The **associative property** shows that the **\_\_\_\_\_\_\_\_\_\_\_\_\_** of the numbers does not change \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |
| --- | --- |
| **Associative Property** | |
| **Addition** | **Multiplication** |

The **identity property** shows that the sum of any number and \_\_\_\_\_\_\_\_\_\_\_ is that number and that the product of any number and \_\_\_\_\_\_\_\_\_ is that number.

|  |  |
| --- | --- |
| **Identity Property** | |
| **Addition** | **Multiplication** |

**Directions:** Write the property that is represented by the given equation.

1. 3 + 9 = 9 + 3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. (7 • 13) • 5 = 7 • (13 • 5) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 12 • 4 = 4 • 12 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 615 + 0 = 615 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. (x + y) + z = x + (y + z) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. j • 1 = j \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions:** Complete the equation to represent each property.

1. Associative Property (x)

9(7 x 8)= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Multiplicative Inverse

3 x \_\_\_\_= 1

1. Additive Identity

8 + \_\_\_\_= 8

1. Commutative Property (+)

12 + 90 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Multiplicative Identity

24 x \_\_\_\_ = 24

1. Additive Inverse

62 + \_\_\_\_ = 0

1. Associative Property (+)

8 + (7 +12) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Commutative Property (x)

34 x 54 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_